Work Order ID 111329

January-13-14 10:18:06 AM

111329

Item ID: D4634-3 **Accept** *N900040100* **Setup Start** *NS1*

Revision ID: **Stop** *NS2*

Item Name: Middle, Center Ceiling Panel

Start Date: 1/13/14 **Start Qty:** 1.00 *1*

Required Date: 1/27/14 **Req'd Qty:** 1.00 *1*

Reference:

Cust Item ID:

Customer:

Run Start *NR1*

Stop *NR2*

Approvals: **Process Plan:** MLJ **Date:** 14-01-13 **Tooling:** _____ **Date:** _____

QC: _____ **Date:** _____ **SPC (Y/N):** _____ **Date:** _____

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr D4634	**Revision Nbr** ~~PD2~~ E DL								
100		0.00							
100	HAND FINISHING THERMOFORMING					x1			DL 14/01/12
Thermoform	**Memo**	0.00							
Thermoforming Machine	Cut Blanks								
105		0.00							
105	Dry Material					x1			DL 14/01/12
HandThermo	**Memo**	0.00							
Hand Finishing Thermoforming	Dry Sheet as per QSI022 POLYCARBONATE								

Temp: 345

Time IN: 5:00 AM 14/01/11

Time OUT: 6:00 am 14/01/12

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: Date: Work Order update only ☐

Work Order: _____

Part No. _____

NCR No. _____

DISPOSITION

Rework ☐
Scrap ☐
Use-as-is ☐
Suspected Unapproved ☐

AGAINST DEPARTMENT/PROCESS

Skid-tube ☐ Crosstube ☐ Water Jet ☐ Engineering ☐
Machining ☐ Small Fab ☐ Prod. Eng. Coor. ☐ Quality ☐
Thermoforming ☐ Finishing ☐ Rec/Store/Packaging ☐ Other ☐
Large Fab ☐ Composite ☐ Supplier ☐ ☐

Root Cause		Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design	☐									
Doc/Data	☐									
Equip/Tooling	☐									
Handling/Pre	☐									
Material	☐									
Operator	☐									
Offset/Setup	☐									
Process	☐									
Supplier	☐									
Training	☐									
Transport	☐									
Unapproved	☐									

FAULT CATEGORY

Landing Gear

☐ Bending
☐ Centre Not Concentric
☐ Cracks
☐ Crimp/Kink/Ripple/Wave
☐ Cuffs
☐ Crushing
☐ Heat Treat
☐ Inspection Strip in Tube
☐ Marks/Chatter
☐ Turning Sequence
☐ Wave/Twist in Tube

General

☐ Bend
☐ BOM/Route
☐ Broken/Damage/Defect
☐ Burrs
☐ Contamination
☐ Countersink
☐ Cut Too Short
☐ Drawing
☐ Drill Holes
☐ Finish
☐ Fit/Function

☐ Folio/Program
☐ Grain
☐ Hardware
☐ Inspection Incomplete/Unqualified
☐ Instructions Incomplete/Unclear
☐ Misaligned/off center
☐ Mislabeled
☐ Misread
☐ Off-set
☐ Out of Calibration
☐ Out of Sequence

☐ Outside Dimensions
☐ Over/Under tolerance
☐ Part Incorrect
☐ Part Lost/Missing
☐ Part Moved
☐ Positioned Wrong
☐ Power Loss/Surge

☐ Pressure/Forced
☐ Set-up
☐ Temperature/Cure
☐ Weld
☐ Wrong Stock Pulled

☐ Other

Item ID: D4634-3 **Accept** *N900040100* **Setup Start** *NS1*
Revision ID: **Stop** *NS2*
Item Name: Middle, Center Ceiling Panel

Start Date: 1/13/14 **Start Qty:** 1.00 *1*
Required Date: 1/27/14 **Req'd Qty:** 1.00 *1*
Reference:

Cust Item ID:
Customer:

Approvals: **Process Plan:** _____ **Date:** _____ **Tooling:** _____ **Date:** _____
QC: _____ **Date:** _____ **SPC (Y/N):** _____ **Date:** _____

Run Start *NR1*
Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
110		0.00							
110	THERMOFORMING MACHINE					X1			DH 14/01/12
Thermoform	**Memo**	0.00							
Thermoforming Machine	Thermoform as per Dwg. D4634-3 and Folio FTA145								
	Dwg. Rev. E								
	Folio Rev. B								
	Visually inspect for proper formation and texture								
130		0.00							
130	HAND FINISHING THERMOFORMING					X1		JB	14/01/20
Thermoform	**Memo**	0.00							
Thermoforming Machine	Trim to Finished Dimensions								
140	QC2- Inspect parts off machine FAI/FAIB	0.00							
140						X		JB	14/01/28
QC	**Memo**	0.00							
Quality Control									

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE

DART AEROSPACE

QA Closed: Date: Work Order update only ☐

Work Order: _____

Part No. _____

NCR No. _____

DISPOSITION

Rework ☐
Scrap ☐
Use-as-is ☐
Suspected Unapproved ☐

AGAINST DEPARTMENT/PROCESS

Skid-tube ☐ Crosstube ☐ Water Jet ☐ Engineering ☐
Machining ☐ Small Fab ☐ Prod. Eng. Coor. ☐ Quality ☐
Thermoforming ☐ Finishing ☐ Rec/Store/Packaging ☐ Other ☐
Large Fab ☐ Composite ☐ Supplier ☐ ☐

Root Cause		Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design	☐									
Doc/Data	☐									
Equip/Tooling	☐									
Handling/Pre	☐									
Material	☐									
Operator	☐									
Offset/Setup	☐									
Process	☐									
Supplier	☐									
Training	☐									
Transport	☐									
Unapproved	☐									

FAULT CATEGORY

Landing Gear

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☐ Inspection Strip in Tube
☐ Marks/Chatter
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☐ Wave/Twist in Tube

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☐ Drawing
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☐ Grain
☐ Hardware
☐ Inspection Incomplete/Unqualified
☐ Instructions Incomplete/Unclear
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☐ Misread
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☐ Out of Calibration
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☐ Outside Dimensions
☐ Over/Under tolerance
☐ Part Incorrect
☐ Part Lost/Missing
☐ Part Moved
☐ Positioned Wrong
☐ Power Loss/Surge

☐ Pressure/Forced
☐ Set-up
☐ Temperature/Cure
☐ Weld
☐ Wrong Stock Pulled

☐ Other

Item ID: D4634-3 **Accept** *N9000040100* **Setup Start** *NS1*
Revision ID: **Stop** *NS2*
Item Name: Middle, Center Ceiling Panel
Start Date: 1/13/14 **Start Qty:** 1.00 *1* **Cust Item ID:**
Required Date: 1/27/14 **Req'd Qty:** 1.00 *1* **Customer:**
Reference:

Approvals: **Process Plan:** _____ **Date:** _____ **Tooling:** _____ **Date:** _____ **Run Start** *NR1*
QC: _____ **Date:** _____ **SPC (Y/N):** _____ **Date:** _____ **Stop** *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
150 *150* QC Quality Control	QC5- Inspect part completeness to step on W/O	0.00 DAS 27 9-39				1			
	Memo	0.00 14/1/30							
160 *160* Packaging Packaging	Packaging	0.00 medFab				1	14/02/11		SAO
	Memo	0.00							
170 *170* QC Quality Control	QC21- Final Inspection - Work Order Release	0.00				MLJ 14-02-11			
	Memo	0.00				14-02-11			

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: Date: Work Order update only ☐

Work Order: _____

Part No. _____

NCR No. _____

DISPOSITION

Rework ☐
Scrap ☐
Use-as-is ☐
Suspected Unapproved ☐

AGAINST DEPARTMENT/PROCESS

Skid-tube ☐ Crosstube ☐ Water Jet ☐ Engineering ☐
Machining ☐ Small Fab ☐ Prod. Eng. Coor. ☐ Quality ☐
Thermoforming ☐ Finishing ☐ Rec/Store/Packaging ☐ Other ☐
Large Fab ☐ Composite ☐ Supplier ☐ ☐

Root Cause		Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design	☐									
Doc/Data	☐									
Equip/Tooling	☐									
Handling/Pre	☐									
Material	☐									
Operator	☐									
Offset/Setup	☐									
Process	☐									
Supplier	☐									
Training	☐									
Transport	☐									
Unapproved	☐									

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☐ Broken/Damage/Defect
☐ Burrs
☐ Contamination
☐ Countersink
☐ Cut Too Short
☐ Drawing
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☐ Misread
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☐ Out of Calibration
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☐ Outside Dimensions
☐ Over/Under tolerance
☐ Part Incorrect
☐ Part Lost/Missing
☐ Part Moved
☐ Positioned Wrong
☐ Power Loss/Surge
☐ Pressure/Forced
☐ Set-up
☐ Temperature/Cure
☐ Weld
☐ Wrong Stock Pulled
☐ Other _____

Picklist Print

January-13-14 10:18:09 AM

Work Order ID: 111329 *111329*

Parent Item: D4634-3 *D4634-3*

Parent Item Name: Middle, Center Ceiling Panel

Start Date: 1/13/14 **Required Date:** 1/27/14

Start Qty: 1.00 **Required Qty:** 1.00

Comments: IPP Rev. A New Issue 12/05/07 DL VERIFIED BY:JLM IPP Rev. B Dwg. Update 13/07/09 DL verf:DD IPP Rev C Dwg Update, Material Change 13/12/18 DL

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
MLEXS.093-F6006-07		Purchased	No			100	sf	1,861.260	12.93	16			

MLEXS.093-F6006-07

GE PLASTICS LEXAN SHEET

Location	Loc Qty	Loc Code	
MAT023	1861.26		
114459	229.26		
123105	38		
124501	1594		16 sq ft

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE

DART AEROSPACE

QA Closed: Date: Work Order update only ☐

Work Order: _____

Part No. _____

NCR No. _____

DISPOSITION

Rework ☐
Scrap ☐
Use-as-is ☐
Suspected Unapproved ☐

AGAINST DEPARTMENT/PROCESS

Skid-tube ☐ Crosstube ☐ Water Jet ☐ Engineering ☐
Machining ☐ Small Fab ☐ Prod. Eng. Coor. ☐ Quality ☐
Thermoforming ☐ Finishing ☐ Rec/Store/Packaging ☐ Other ☐
Large Fab ☐ Composite ☐ Supplier ☐ ☐

Root Cause		Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design	☐									
Doc/Data	☐									
Equip/Tooling	☐									
Handling/Pre	☐									
Material	☐									
Operator	☐									
Offset/Setup	☐									
Process	☐									
Supplier	☐									
Training	☐									
Transport	☐									
Unapproved	☐									

FAULT CATEGORY

Landing Gear

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☐ Power Loss/Surge
☐ Pressure/Forced
☐ Set-up
☐ Temperature/Cure
☐ Weld
☐ Wrong Stock Pulled
☐ Other _____

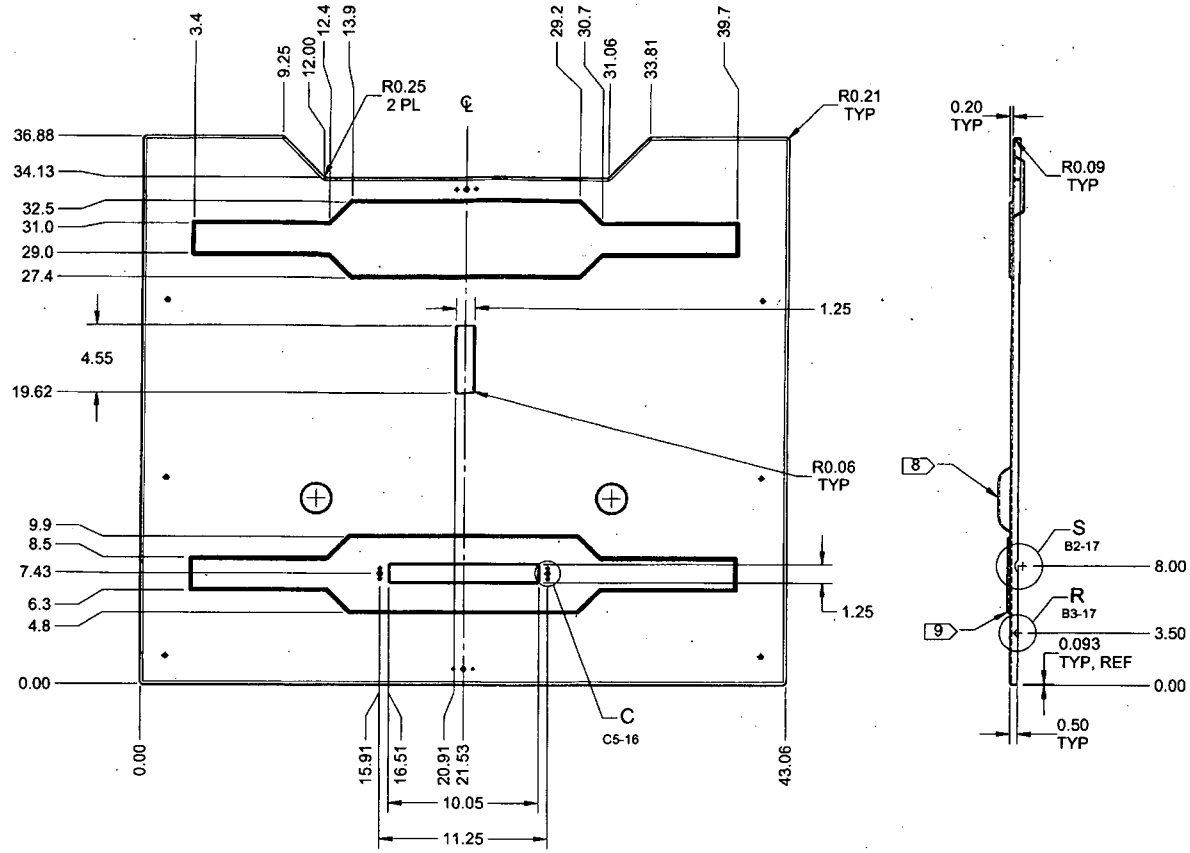
DART AEROSPACE LTD

Description:	PAWE	Work Order:	113299
Inspection Drawing:	D4634	Rev:	PE1
Part Number:	D4634-3		

INSPECTION SHEET

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
43.06	.030	43.05	✓		TH 05	
36.88	.030	36.81	✓		TH 05	
.50	.030	.514	✓		TH 01	
7.43	.030	7.43	✓		TH 05	
1.25	.030	1.223	✓		TH-01	
10.05	.030	10.100	✓		TH-05	
11.25	.030	11.25	✓		TH 05	
21.53	.030	21.53	✓		TH 05	
19.62	.030	19.625	✓		TH 05	
1.25	.030	1.259	✓		TH 01	
4.55	.030	4.55	✓		TH 01	
1.88	.030	1.89	✓		TH 01	
1.66	.030	1.647	✓		TH 01	
12.00	.030	12.00	✓		TH 05	
24.00	.030	24.00	✓		TH 05	
2.03	.030	2.005	✓		TH 01	
11.7	.100	11.7	✓		TH 05	
12.5	.100	12.66	✓		TH 05	
.250		.250	✓		TH-01	

Measured by:	Checked By: DAS 27 9-89	QC inspector:	Engineering Approval (*if necessary*):
Date 14/01/28	Date 14/1/30	Date 14/2/11	Date



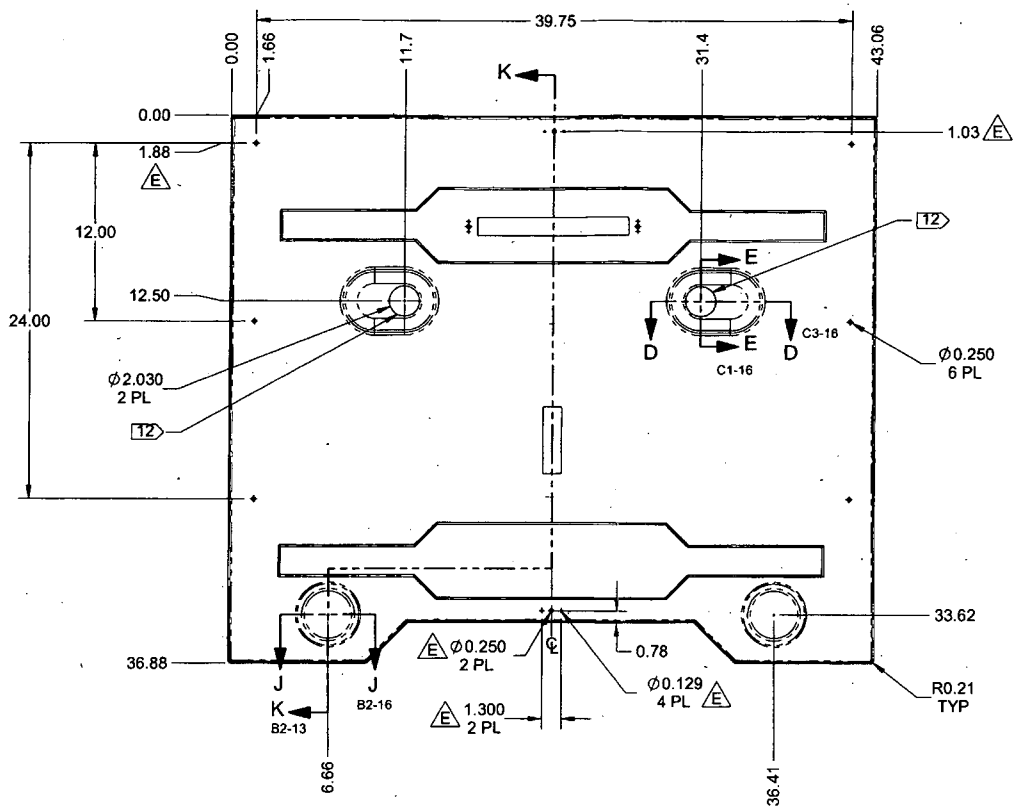
NOTES:
1) MATERIAL: F6006 SUEDE/POLISHED GY5B133 LIGHT GREY LEXAN SHEET 0.093 THICK
(REF DART SPEC MLEXS.093-F6006-07)
2) FINISH: N/A
3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
4) UNITS: INCHES UNLESS OTHERWISE NOTED
5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
6) IDENTIFICATION: N/A
7) WEIGHT: 6.49 lbs
8) TEXTURE ON THIS SIDE
9) 0.14 RADIUS NOT SHOWN FOR CLARITY
10) DRILL & TRIM D4634-3 PER TOOL DT9837
11) THERMOFORM PER QSI 022 USING DT9845 TOOL
MIN. THICKNESS AFTER FORMING:
EDGES = 0.060
ELSEWHERE = 0.070
12) LOCATE Ø2.030 AT CENTER OF PROTRUDED SURFACE AS SHOWN

D4634-3 MIDDLE, CENTER CEILING PANEL

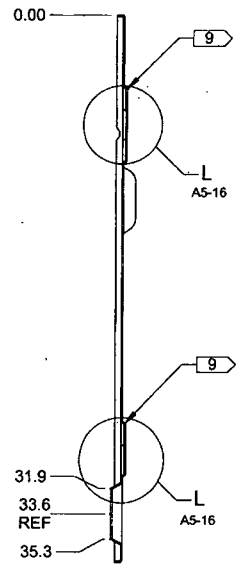
RELEASED
2014 -01- 22

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DRAWN	RF	HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO.	REV. E
MFG. APPR.		D4634	SHEET 12 OF 17
APPROVED		TITLE	SCALE
DE APPR.		CENTER CEILING PANELS	NTS
DATE	14.01.09		

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D4634-3 MIDDLE, CENTER CEILING PANEL
AUXILIARY VIEW

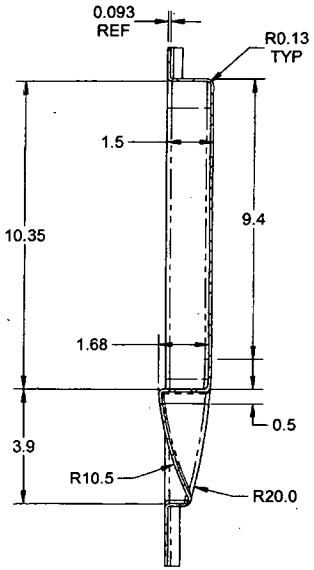


SECTION K-K B6-13

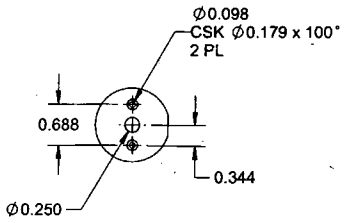
RELEASED
2014 -01- 22

DESIGN	RF	**DART AEROSPACE LTD** HAWKESBURY, ONTARIO, CANADA
DRAWN	RF	
CHECKED	BC	DRAWING NO. D4634 REV. E
MFG. APPR.		SHEET 13 OF 17
APPROVED		TITLE CENTER CEILING PANELS SCALE NTS
DE APPR.		
DATE	14.01.09	

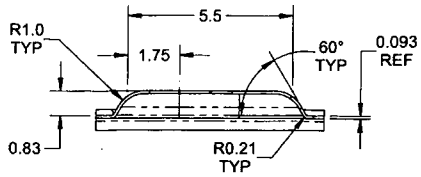
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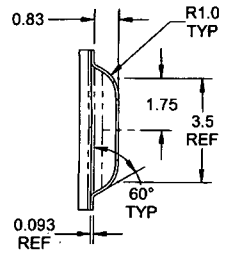
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SCALE 4X



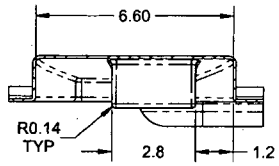
DETAIL C B7-10 B4-12 B4-14
SCALE 4X



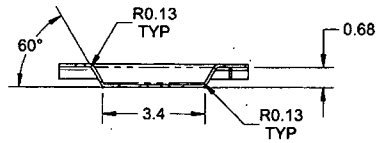
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SCALE 2X



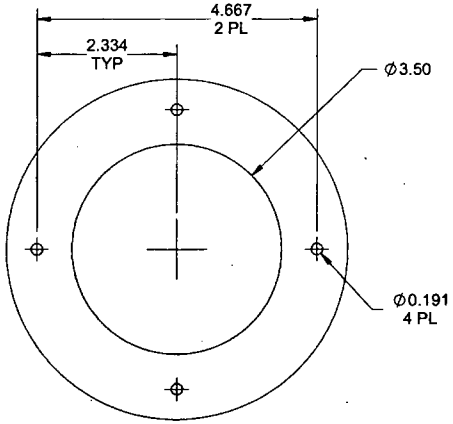
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SCALE 4X



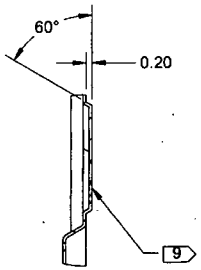
SECTION H-H C5-11
SCALE 2X



SECTION J-J B6-13
SCALE 2X



E **DETAIL B** B7-10
SCALE 4X
2 PL

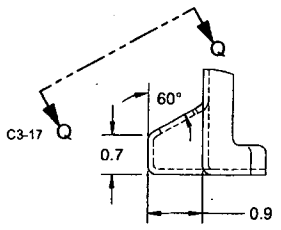


DETAIL L B2-13 C2-13 B2-14 C2-14
SCALE 4X
TYP

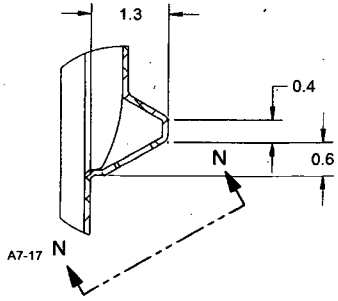
RELEASED
2014 -01- 22

DESIGN	RF	**DART AEROSPACE LTD**	
DRAWN	RF	HAWKESBURY, ONTARIO, CANADA	
CHECKED	DC	DRAWING NO.	REV. E
MFG. APPR.		D4634	SHEET 16 OF 17
APPROVED		TITLE	SCALE
DE APPR.		CENTER CEILING PANELS	NTS
DATE	14.01.09		

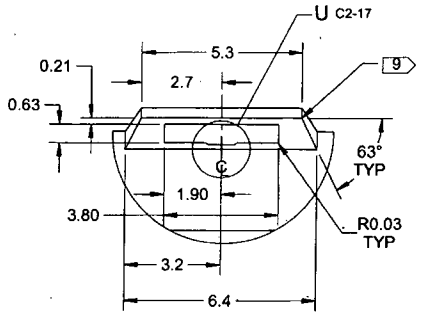
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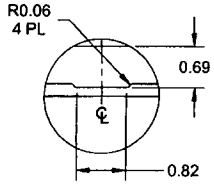
DETAIL P B3-14
SCALE 2X



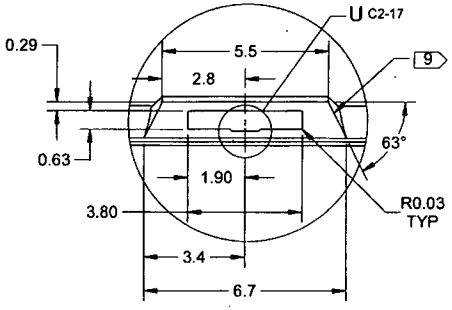
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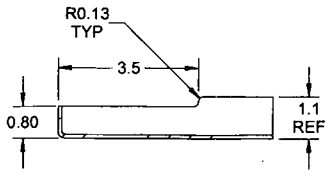
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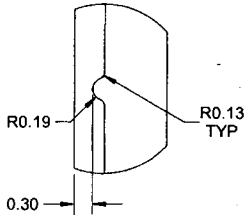
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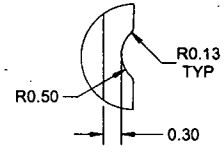
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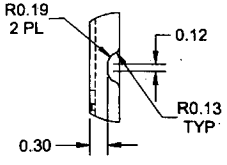
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DETAIL R B3-10 C3-10 B2-12
SCALE 4X



DETAIL S B3-10 C2-12
SCALE 4X



DETAIL T C2-14
SCALE 4X

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